

What is claimed is:

1           1.       A shield assembly for a connector that is connected to a port of a chassis, a  
2 cable extending from the connector, the shield assembly comprising:  
3               a cover defining a chamber to enclose the connector;  
4               an attachment mechanism adapted to attach the cover to the chassis; and  
5               a cable engagement body having an opening with a width less than a width  
6 of the chamber, the opening adapted to surround an outer surface of a portion of the  
7 cable.

1           2.       The shield assembly of claim 1, wherein the cover is formed of an  
2 electrically conductive material.

1           3.       The shield assembly of claim 1, wherein the cable engagement body  
2 comprises a neck portion extending from the cover.

1           4.       The shield assembly of claim 1, wherein the cable engagement body is  
2 integrally formed with the cover.

1           5.       The shield assembly of claim 4, wherein the cable engagement body has  
2 an outer width that is less than an outer width of the cover.

1           6.       The shield assembly of claim 1, wherein the cable engagement body  
2 comprises an inner surface defining the opening, and wherein the width of the opening is  
3 substantially the same as a width of the cable to enable the inner surface of the cable  
4 engagement body to contact an outer surface of the cable.

1           7.       The shield assembly of claim 6, wherein the cable engagement body is  
2 formed at least in part of an electrically conductive material to enable the cable  
3 engagement body to be capacitively coupled to a shield of the cable.

1           8.     The shield assembly of claim 6, wherein the cable engagement body  
2 comprises an electrically conductive element adapted to pierce through an outer jacket of  
3 the cable to enable electrical connection between the cable engagement body and a shield  
4 of the cable.

1           9.     The shield assembly of claim 1, wherein the opening has a predetermined  
2 length, the opening adapted to surround the outer surface of the portion of the cable along  
3 the predetermined length.

1           10.    The shield assembly of claim 1, wherein the opening has a cross-sectional  
2 shape selected from the group consisting of generally circular, oval, rectangular, and  
3 square.

1           11.    The shield assembly of claim 1, wherein the opening has a cross-sectional  
2 shape that forms a closed polygon.

1           12.    A connector assembly for mating with a port in a chassis, comprising:  
2                   a connector having a housing, the connector adapted to mate with the port;  
3                   a cable extending from the connector; and  
4                   a shroud adapted to enclose the connector housing, the shroud having an  
5 electrically conductive first end to electrically contact the chassis and a cable engagement  
6 body having an inner opening to receive the cable, the cable engagement body having an  
7 inner surface in contact with an outer surface of the cable.

1           13.    The connector assembly of claim 12, wherein cable engagement body  
2 comprises a neck portion having an outer width that is less than an outer width of another  
3 part of the shroud.

1           14.    The connector assembly of claim 12, wherein the cable comprises a shield  
2 and an outer insulating layer, and wherein the inner surface of the cable engagement body  
3 is capacitively connected to the cable shield through at least the outer insulating layer.

1 15. The connector assembly of claim 14, wherein a capacitive impedance is  
2 provided between the cable engagement body and the cable shield in response to  
3 transmission of a signal at a predetermined frequency in the cable.

1 16. The connector assembly of claim 12, wherein the shroud defines a  
2 chamber in which the connector is located, the width of the inner opening being less than  
3 a width of the chamber.

1 17. The connector assembly of claim 12, wherein the cable engagement body  
2 has a predetermined length, the cable engagement body surrounding a portion of the  
3 cable along the predetermined length.

1 18. The connector assembly of claim 12, further comprising an attachment  
2 mechanism adapted to attach the shroud to the chassis.

1 19. The connector assembly of claim 18, further comprising an  
2 electromagnetic interference gasket in contact with a surface of the shroud to enhance the  
3 electrical contact between the shroud and the chassis.

1 20. The connector assembly of claim 12, wherein the cable has an outer  
2 insulating jacket and a shield, and the cable engagement body has at least one piercing  
3 element protruding from the inner surface of the cable engagement body, the piercing  
4 element adapted to penetrate the outer jacket of the cable to electrically contact the cable  
5 shield.

1 21. The connector assembly of claim 12, wherein the connector comprises one  
2 or more contacts contained in the connector housing.

1 22. The connector assembly of claim 21, wherein the cable comprises a shield,  
2 and wherein the connector housing is electrically contacted to the shield.

1           23.     The connector assembly of claim 21, wherein the cable has an outer  
2 shield, the inner surface of the cable engagement body being in electrical contact with the  
3 outer shield.

1           24.     A method of reducing electromagnetic interference, comprising:  
2                 providing a connector having a housing;  
3                 electrically contacting the connector housing to a shield of a cable;  
4                 enclosing the connector within a shroud; and  
5                 contacting an inner surface of a portion of the shroud to an outer surface of  
6 the cable extending from the connector.

1           25.     The method of claim 24, further comprising:  
2                 communicating a signal at a predetermined frequency in the cable; and  
3                 providing a capacitive impedance between the shroud portion and the  
4 cable shield to reduce electromagnetic leakage.

1           26.     The method of claim 24, wherein contacting the inner surface of the  
2 shroud portion to the outer surface of the cable comprises contacting the inner surface to  
3 the cable shield.

1           27.     The method of claim 26, wherein contacting the cable shield comprises  
2 penetrating, with a piercing element, an outer jacket of the cable, the piercing element  
3 being electrically conductive to electrically connect the shroud portion and the cable  
4 shield.

1           28.     The method of claim 26, further comprising removing at least a portion of  
2 an outer jacket of the cable to enable the shroud portion to contact the cable shield.

1           29.    A system comprising:  
2                a chassis having a structure defining a port;  
3                a connector adapted to mate with the port;  
4                a cable extending from the connector, the cable having a shield, the  
5 connector having a housing electrically contacted to the structure and the shield; and  
6                a shroud enclosing the connector.

1           30.    The system of claim 29, wherein the shroud has a portion defining a bore  
2 surrounding an outer surface of the cable.

1           31.    The system of claim 30, wherein a capacitive connection is provided  
2 between the shroud portion and the cable shield.

1           32.    The system of claim 31, wherein the shroud portion comprises a neck  
2 portion.